# THE BRAZILIAN SPECIES OF THE SPIDER GENUS EPHEBOPUS SIMON, 1892 (ARANEAE, THERAPHOSIDAE, AVICULARIINAE), WITH DESCRIPTION OF E. UATUMAN N. SP.

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ABSTRACT: A new species of the genus *Ephebopus* Simon, 1892, *E. uatuman*, is described from the Amazonean Region of Brazil. Concerning *E. violaceus* Mello Leitão, 1930, type misplaced or lost despite registered in the Arachnological Collection of the Museu Nacional do Rio de Janeiro, Brazil, we conclude, after the short description of the author, that this species exhibit characteristics of the genus *Avicularia*, since the first ocular row is very procurve. The total length of only 23mm, the design on the dorsal side of the abdomen and the division of the posterior tarsal scopulae suggests that the specimen is a juvenile. Therefore two are the Brazilian species of the genus *Ephebopus: E. murinus* and *E. uatuman*.

KEYWORDS: Taxonomy. Genus *Ephebopus* Simon, 1892 (ARANEAE, THERAPHOSIDAE, AVICULARIINAE) in Brazil: *E. murinus* (Walckenaer), 1837, *E. uatuman* n. sp. *E. violaceus* is synonimous of *Avicularia violacea* (Mello Leitão), 1930.

### INTRODUCTION

The genus *Ephebopus* Simon, 1892 is represented in Brazil by two species: *E. murinus* (Walckenaer), 1837 and *E. violaceus* Mello Leitão, 1930.

Lucas et al (1991) described the first known male of *Ephebopus, E. murinus* and transfered the genus to the subfamily AVICULARIINAE due to the presence of spatulate tarsal scopulae, mainly at tarsi I and II of the female, legs without spines or with weak spines, palpal bulb globulous with a long thin embolus, without keels or crests and presence of urticating hairs of type II after the classification of Cooke *et al.* (1972) on the inner side of the apex of the palpal femur.

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During the faunal rescue that took place on the Hydroelectric Power Station of Balbina, on the Uatuman River, State of Amazonas, Brazil, there were collected numerous specimens of a new species of the genus Ephebopus, which description is given here.

# Ephebopus uatuman n. sp. (Fig. 1 to 7)

The types are deposited in the Mygalomorphae Collection of the Venomous Arthropods Laboratory of the Instituto Butantan, São Paulo, Brazil.

Types: Holotype: or (IB 4939), District of Presidente Figueiredo (Hydroelectric Power Station of Balbina, Uatuman River), State of Amazonas, Brazil, feb. 1988, col.

M. Costa, Alotype: Q (IB 4940) ibidem, Paratypes: 5 Q, 2 \( \sqrt{Q} \) (IB 4941), ibidem, 1 juvenile (IB 4941), ibidem.

Etymology: derived from the type locality: Uatuman River.

# DESCRIPTION OF THE HOLOTYPE

Measurements in mm.

Total lenght with chelicerae: 34,0 Total lenght without chelicerae: 29,1

Lenght and width of the cephalotorax: 12,0/11,5 Legs: I 56,5 II 50,3 III 44,2 IV 52,9 I-IV-II-III

Cephalotorax longer than wide, foveal groove slightly procurve, eye tubercle low, twice wider than long, anterior median eyes larger than anterior lateral, posterior median eyes of the same syze as the posterior lateral and smaller than the anterior. First row of eyes slightly procurve. Labium slightly wider than long with numerous apical cuspules. Maxillary lobes with cuspules on the inner side, next to the labium. Sternal sigilla submarginal, the posterior pair larger than the two others pairs. Tarsal scopulae extending all over the segment, well developed and spatulate. Metatarsi I and II with scopulae reaching the base of the segment, metatarsi III only present on the 3/4 apical and on metatarsi IV only apical. The spines are scarce, present only on the apex of tibiae and metatarsi, on the ventral side. The palpal bulb in globulous and presents a long and slender embolus, without keels or crests, with a slender fold near the apex. (Fig. 3 and 4). The tibial apophysis is double and present a spine, on the internal side of each spur (Fig. 5). The metatarsus clothes against the external side of the bigger spur. The inner side, near the apex of the palpal femur presents a region of urticating hairs of type II (Fig. 6).

# DESCRIPTION OF THE ALOTYPE

The characteristics are very similar to that of the holotype. The tarsal scopulae are more developed and the receptacula seminalis are double, more chitinous on the apex with a common basis (Fig. 7).

#### COLORATION

The specimens present a greenish color with metallic reflexes, mainly in the females and juveniles. The legs show transversal bands on the segments, just near

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the articulation, brighter between patella and femur and metatarsus and tarsus. The dorsal surface of the carapace of the males is dark brown covered with few hairs. Sternum and coxae also dark and with short hairs, between them, some longer hairs with paler ends. Abdomen with short dark hairs and also longer reddish hairs on the sides. Ventral side with short hairs, reddish near the apex. The females exhibit a lighter brown color on the dorsal side of the cephalotorax and abdomen. Sternum and coxae are blackish. The ventral side of the abdomen is darker than the dorsal side. Young specimens show legs and spinnerets light reddish brown, in the adults the legs and spinnerets are darker.

#### **BIOLOGY**

All specimens were collected during the faunal rescue, near the Uatuman River, on half submerged branches, floating trunks an on the margins. In captivity, males and females build a silk tube very similar to the one constructed by E. murinus and they also have the same hair shedding behavior for defense.

#### DIFERENTIAL DIAGNOSIS

Ephebopus uatuman differs from E. fossor Pocock, 1903 and E. murinus (Walckenaer), 1837 mainly by the coloration and absence of the pale longitudinal bands present on patellae and tibiae of the last two species. Females of E. murinus are bigger and stronger than E. uatuman. Such differences were not detected in the males. The palpal bulb aspect is very similar, exhibiting small differences, such as: triangulate shape basis, with a slight torsion on the apex, in E. uatuman. In E. murinus the basis of the embolus is more cilindrical, the embolus is thinner and has a torsion on the basis. The seminal receptacula are also very similar.

# SYSTEMATIC DISCUSSION

*Ephebopus uatuman* exhibit the characteristics of the genus *Ephebopus*: first ocular row slightly procurved and the presence of a region of urticating hairs on the inner side of the apex of the palpal femur.

Concerning *E. violaceus* Mello Leitão, 1930 the type seems to be lost. The curator was unable to find it in the Arachnological Collection of the Museu Nacional do Rio de Janeiro.

The genus *Ephebopus* and the species *E. murinus* were unknown by Mello Leitão in 1923. He proposed a modification of Pocock's key from 1901, thus including his new genus *Ancylochiros*. In this work he distinguished the genus *Ephebopus* from *Avicularia* (Lamarck) 1818 mainly by the presence of a division of the posterior scopulae of the tarsi and also by the slightly procurve first ocular row. In *Avicularia* the posterior tarsi has an integral scopulae and the first ocular row is strongly procurve.

In the description of *E. violaceus* the author mentioned a strongly procurve first ocular row and also a division of the posterior tarsal scopulae. We conclude that the specimen of *Ephebopus violaceus* described by Mello Leitão is a juvenile *Avicularia*, because, beside the strongly procurved first ocular row, our experience shows that the division of the tarsal scopulae, and the design present on the dorsal abdominal side are common in young specimens of the genus *Avicularia*.

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Fig. 1 - 2 Ephebopus uatuman n. sp. - 1, male (holotypus); 2, female. (Photos: Giuseppe Puorto)

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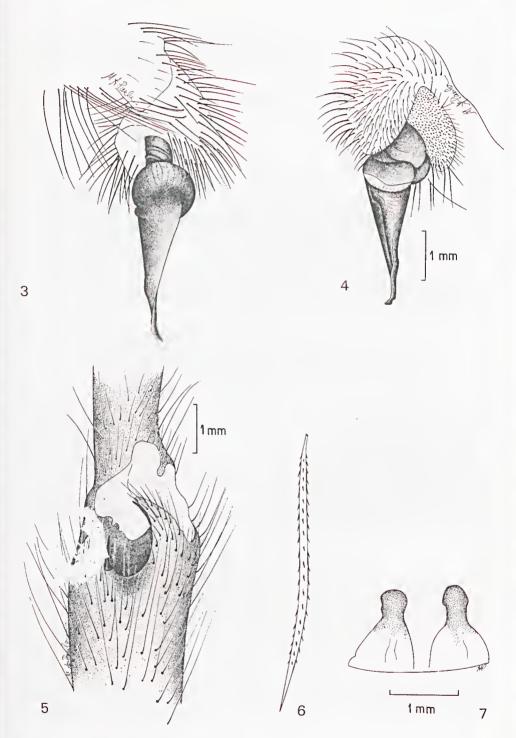


Fig. 3 — 7 Ephebopus uatuman n. sp. — 3, male right palpal bulbus, dorsal view; 4, same, ventral view; 5, male tibial apophysis; 6, urticating hair of type II; 7, receptacula seminalis.

SciELO

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# CONCLUSION

The genus Ephebopus has two valid species described for Brazil: E. murinus and E. uatuman. E. violaceus is transfered to the genus Avicularia.

#### **ACKNOWLEDGMENTS**

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Resumo: É descrita uma nova espécie do gênero Ephebopus Simon, 1892, E. uatuman, para região amazônica do Brasil. Quanto à espécie E. violaceus Mello Leitão, 1930 o tipo não foi localizado, embora conste dos registros da Coleção Aracnológica do Museu Nacional do Rio de Janeiro, Brasil. O comprimento total do exemplar de apenas 23mm, o desenho no dorso do abdômen e a divisão das escópulas tarsais, citados na descrição muito resumida do autor, fazem-nos concluir tratar-se de um exemplar jovem do gênero Avicularia, uma vez que a primeira fila ocular, citada pelo autor como fortemente procurva, é uma característica deste gênero. Portanto, o gênero Ephebopus é representado no Brasil por duas espécies: E. murinus e E. uatuman.

UNITERMOS: Taxonomia. Gênero Ephebopus (ARANEAE, THERAPHO-SIDAE, AVICULARIINAE) no Brasil: E. murinus (Walckenaer), 1837, E. uatuman sp. n. E. violaceus é sinônimo de Avicularia violacea.

#### REFERENCES

- COOKE, J. A. L.; ROTH, V. D.; MILLER, F. M. The urticating hairs of Theraphosidae spiders. Am. Mus. Novit, (2498): 1-43, 1972.
- LUCAS, S.; SILVA JÚNIOR, P. I. da; BERTANI, R. The genus Ephebopus Simon, 1892 (ARA-NEAE, THERAPHOSIDAE, AVICULARIINAE). Description of the male of Ephebopus murinus (Walckenaer), 1837. Spixiana Zeitsch. Zool., 14(3):245-248, 1991.
- MELLO-LEITÃO, C. F. Theraphosoideas do Brasil. Rev. Mus. Paulista, (13): 1-438, 1923.
- MELLO-LEITÃO, C. F. Aranhas do Cumina. Arch. Mus. Nac. Rio de Janeiro, 32: 51-74, 1930. POCOCK, R. I. Some new and old genera of Southamerican AVICULARIIDAE. Ann. Mag.

SCIELO 1

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Nat. Hist. ser 7, 8: 540-555, 1901

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